K 7

```
RRRRRRRRRRRR     UUU         UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRRRRRRRRRRR     UUU         UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRRRRRRRRRRR     UUU         UUU  NNN         NNN     000000000     FFFFFFFFFFFFFFF  FFFFFFFFFFFFFFF
RRR         RRR  UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR         RRR  UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR         RRR  UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR         RRR  UUU         UUU  NNNNNN      NNN  000         000  FFF              FFF
RRR         RRR  UUU         UUU  NNNNNN      NNN  000         000  FFF              FFF
RRR         RRR  UUU         UUU  NNNNNN      NNN  000         000  FFF              FFF
RRRRRRRRRRRR     UUU         UUU  NNN   NNN   NNN  000         000  FFFFFFFFFFFF     FFFFFFFFFFFF
RRRRRRRRRRRR     UUU         UUU  NNN   NNN   NNN  000         000  FFFFFFFFFFFF     FFFFFFFFFFFF
RRRRRRRRRRRR     UUU         UUU  NNN   NNN   NNN  000         000  FFFFFFFFFFFF     FFFFFFFFFFFF
RRR   RRR        UUU         UUU  NNN      NNNNNN  000         000  FFF              FFF
RRR   RRR        UUU         UUU  NNN      NNNNNN  000         000  FFF              FFF
RRR   RRR        UUU         UUU  NNN      NNNNNN  000         000  FFF              FFF
RRR      RRR     UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR      RRR     UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR      RRR     UUU         UUU  NNN         NNN  000         000  FFF              FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN         NNN     000000000     FFF              FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN         NNN     000000000     FFF              FFF
RRR         RRR  UUUUUUUUUUUUUUU  NNN         NNN     000000000     FFF              FFF
```

```
_$2

Sym
---
NDX
NDX
NUM
NUM
OPE
OUT
PAC
PAC
PAC
PAC
PAC
PAC
PAC
PAD
PAG
PAG
PAG
PAG
PAG
PAG
PAG
PER
PUT
RCO
RIN

RLI
RNO
RNO
RTY
SAV
STR
STR
STR
STR
STR
STR

STR
STR
STR
STR
STR
STR
STR
STR
STR
STR
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STR
STR
STR
```

```
**FILE**ID**NDXTMS                                  I 9



NN      NN  DDDDDDDD    XX      XX  TTTTTTTTTT  MM      MM    SSSSSSSS
NN      NN  DDDDDDDD    XX      XX  TTTTTTTTTT  MM      MM    SSSSSSSS
NN      NN  DD      DD  XX      XX      TT      MMMM  MMMM  SS
NN      NN  DD      DD  XX      XX      TT      MMMM  MMMM  SS
NNNN    NN  DD      DD    XX  XX        TT      MM  MM  MM  SS
NNNN    NN  DD      DD    XX  XX        TT      MM  MM  MM  SS
NN  NN  NN  DD      DD      XX          TT      MM      MM    SSSSSS
NN  NN  NN  DD      DD      XX          TT      MM      MM    SSSSSS
NN    NNNN  DD      DD    XX  XX        TT      MM      MM          SS
NN    NNNN  DD      DD    XX  XX        TT      MM      MM          SS
NN      NN  DD      DD  XX      XX      TT      MM      MM          SS      ....
NN      NN  DD      DD  XX      XX      TT      MM      MM          SS      ....
NN      NN  DDDDDDDD    XX      XX      TT      MM      MM  SSSSSSSS        ....
NN      NN  DDDDDDDD    XX      XX      TT      MM      MM  SSSSSSSS        ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

ND
VO

```
0 %TITLE 'NDXTMS -- RUNOFF to TMS-11 conversion'
0 MODULE NDXTMS (IDENT = 'V04-000'
0                %BLISS32 [, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE, NONEXTERNAL = LONG_RELATIVE)]
0                ) =
1 BEGIN
1
1 !
1 !****************************************************************************
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1 !*                                                                          *
1 !*                                                                          *
1 !****************************************************************************
1 !
1
1 !++
1 ! FACILITY:
1 !   DSR (Digital Standard RUNOFF) /DSRPLUS DSRINDEX/INDEX Utility
1 !
1 ! ABSTRACT:
1 !   This module contains code to convert RUNOFF input text lines to
1 !   TMS-11 text lines.
1 !
1 ! ENVIRONMENT:   Transportable
1 !
1 ! AUTHOR:        JPK
1 !
1 ! CREATION DATE: February 1982
1 !
1 ! MODIFIED BY:
1 !
1 !       003     JPK00015        04-Feb-1983
1 !               Cleaned up module names, modified revision history to
1 !               conform with established standards. Updated copyright dates.
1 !
1 !       002     JPK00012        24-Jan-1983
1 !               Modified NDXVMSMSG.MSG to define error messages for both
1 !               DSRINDEX and INDEX.
1 !               Added require of NDXVMSREQ.R32 to NDXOUT, NDXFMT, NDXDAT,
1 !               INDEX, NDXMSG, NDXXTN, NDXTMS, NDXVMS and NDXPAG for BLISS32.
1 !               Since this file defines the error message literals,
;    58          0058  1 !                  the EXTERNAL REFERENCEs for the error message literals
;    59          0059  1 !                  have been removed.
;    60          0060  1 !
;    61          0061  1 !--
;    63          0062  1 !
;    64          0063  1 ! TABLE OF CONTENTS:
;    65          0064  1 !
;    66          0065  1
;    67          0066  1 FORWARD ROUTINE
;    68          0067  1     RNOTMS : NOVALUE,                          ! Generate TMS-11 output
;    69          0068  1     TMSPUT : NOVALUE;                          ! Put a line to output file
;    70          0069  1
;    71          0070  1 !
;    72          0071  1 ! INCLUDE FILES:
;    73          0072  1 !
;    74          0073  1
;    75          0074  1 LIBRARY 'NXPORT:XPORT';
;    76          0075  1
;    77        L 0076  1 %IF %BLISS (BLISS32)
;    78          0077  1 %THEN
;    79          0078  1
;    80          0079  1 REQUIRE 'REQ:NDXVMSREQ';
;    81          0360  1
;    82          0361  1 %FI
;    83          0362  1
;    84          0363  1 !
;    85          0364  1 ! MACROS:
;    86          0365  1 !
;    87          0366  1 !
;    88          0367  1 ! EQUATED SYMBOLS:
;    89          0368  1 !
;    90          0369  1
;    91          0370  1 GLOBAL LITERAL
;    92          0371  1     TMSSTD = 20,                               ! Relative size of average character for TMS
;    93          0372  1     MSPACE = 32;                               ! TMS 'em' space size
;    94          0373  1
;    95          0374  1 LITERAL
;    96          0375  1     TRUE = 1,
;    97          0376  1     FALSE = 0,
;    98          0377  1     BUFFER_SIZE = 2000;
;    99          0378  1
;   100          0379  1 !
;   101          0380  1 ! OWN STORAGE:
;   102          0381  1 !
;   103          0382  1
;   104          0383  1 GLOBAL                                         ! Top of file string
;   105          0384  1     TMSTOF : $STR_DESCRIPTOR (CLASS = DYNAMIC, STRING = (0, 0));
;   106          0385  1
;   107          0386  1 GLOBAL
;   108          0387  1     TMSSIZ : INITIAL (40);                     ! TMS file size in blocks
;   109          0388  1
;   110          0389  1 GLOBAL
;   111          0390  1     CHRSIZ : REF VECTOR [256];
;   112          0391  1
;   113          0392  1 GLOBAL
;   114          0393  1     CHRSZA : VECTOR [256] INITIAL (            ! TMS11 character size vector for "A" format
;   115          0394  1         REP 32 OF (0),                         ! NUL - US
;   116          0395  1         13, 14, 20, 18, 18, 30, 28, 10, 14, 14, ! space ! " # $ % & ' ( )
;   117          0396  1         18, 24, 11, 18, 11, 12,                ! * + , - . /
;   118          0397  1         REP 10 OF (18),                        ! 0 1 2 3 4 5 6 7 8 9
;   119          0398  1         12, 12, 24, 24, 24, 18, 30,            ! : ; < = > ? @
;  120        0399  1           26, 26, 26, 28, 26, 23, 28, 30, 13, 19,  ! A B C D E F G H I J
;  121        0400  1           30, 24, 36, 30, 28, 24, 28, 26, 23, 26,  ! K L M N O P Q R S T
;  122        0401  1           28, 26, 36, 30, 26, 24,                  ! U V W X Y Z
;  123        0402  1           10, 18, 10, 19, 26, 19,                  ! [ \ ] ^ _ `
;  124        0403  1           19, 21, 17, 21, 17, 12, 18, 21, 11, 11,  ! a b c d e f g h i j
;  125        0404  1           20, 11, 32, 21, 18, 21, 20, 14, 15, 14,  ! k l m n o p q r s t
;  126        0405  1           21, 19, 26, 19, 19, 17,                  ! u v w x y z
;  127        0406  1           11,  9, 11, 19,  0,                      ! { | } ~ DEL
;  128        0407  1           REP 128 OF (0));                         ! Rest of control characters
;  129        0408  1
;  130        0409  1   GLOBAL
;  131        0410  1       CHRSZE : VECTOR [256] INITIAL (              ! TMS11 character size vector for "E" format
;  132        0411  1           REP 32 OF (0),                           ! NUL - US
;  133        0412  1           13, 12, 12, 28, 20, 32, 26, 12, 10, 10,  ! space ! " # $ % & ' ( )
;  134        0413  1           16, 32, 12, 20, 12, 10,                  ! * + , - . /
;  135        0414  1           REP 10 OF (20),                          ! 0 1 2 3 4 5 6 7 8 9
;  136        0415  1           12, 12, 30, 36, 30, 14, 36,              ! : ; < = > ? @
;  137        0416  1           24, 22, 24, 28, 18, 18, 28, 28, 10, 10,  ! A B C D E F G H I J
;  138        0417  1           22, 18, 32, 28, 30, 20, 30, 22, 18, 20,  ! K L M N O P Q R S T
;  139        0418  1           28, 24, 36, 22, 22, 22,                  ! U V W X Y Z
;  140        0419  1           12, 12, 12, 12, 20, 12,                  ! [ \ ] ^ _ `
;  141        0420  1           18, 20, 18, 20, 18, 10, 18, 20, 10, 10,  ! a b c d e f g h i j
;  142        0421  1           18, 10, 30, 20, 20, 20, 20, 12, 14, 10,  ! k l m n o p q r s t
;  143        0422  1           20, 18, 28, 18, 18, 18,                  ! u v w x y z
;  144        0423  1           12, 8, 12, 12, 0,                        ! { | } ~ DEL
;  145        0424  1           REP 128 OF (0));                         ! Rest of control characters
;  146        0425  1
;  147        0426  1   OWN                                         ! Holds old file name when creating a new file
;  148        0427  1       OLD_FILE : $STR_DESCRIPTOR (CLASS = DYNAMIC, STRING = (0, 0));
;  149        0428  1
;  150        0429  1   OWN
;  151        0430  1       TMSCHR  : INITIAL (0),                  ! Number of characters written to output file
;  152        0431  1       FILE_NO : INITIAL (0);                  ! Continuation file number
;  153        0432  1
;  154        0433  1   !
;  155        0434  1   ! EXTERNAL REFERENCES:
;  156        0435  1   !
;  157        0436  1   EXTERNAL LITERAL
;  158        0437  1       TAB : UNSIGNED (8);
;  159        0438  1
;  160      L 0439  1   %IF %BLISS (BLISS32)
;  161        0440  1   %THEN
;  162        0441  1
;  163        0442  1   EXTERNAL ROUTINE                            ! File open error handling routine for BLISS32
;  164        0443  1       OPEN_ERROR;
;  165        0444  1
;  166        0445  1   %FI
```

```
1 %SBTTL 'GLOBAL ROUTINE RNOTMS - Generate TMS-11 Output from RUNOFF text'
1
1 GLOBAL ROUTINE RNOTMS (RNO_LEN, RNO_PTR, DSC) : NOVALUE =
1
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine converts RUNOFF input text to TMS-11 input text
1 !
1 ! FORMAL PARAMETERS:
1 !
1 !       RNO_LEN - Length of input text
1 !       RNO_PTR - CH$PTR to input text
1 !       DSC     - Address of output string descriptor
1 !
1 ! IMPLICIT INPUTS:
1 !
1 !       None
1 !
1 ! IMPLICIT OUTPUTS:
1 !
1 !       None
1 !
1 ! ROUTINE VALUE:
1 ! COMPLETION CODES:
1 !
1 !       None
1 !
1 ! SIDE EFFECTS:
1 !
1 !       None
1 !--
2     BEGIN
2     LOCAL
2         LINE : VECTOR [CH$ALLOCATION (BUFFER_SIZE + 50)],
2         LEADING_BLANKS,
2         I_PTR,                                  ! Copy of input line pointer
2         I_LEN,                                  ! Copy of input line length
2         L_PTR,                                  ! Pointer to output line
2         L_LEN,                                  ! Length of output line
2         DOING_BOLD,                             ! Bold sequence in progress
2         DOING_ITALICS,                          ! Italic sequence in progress
2         BOLD_CHAR,                              ! Current character is bold
2         ITALIC_CHAR,                            ! Current character is italic
2         OPEN_QUOTE,                             ! Next '' is an open quote if TRUE
2         CH;                                     ! Current character
2
2     L_LEN = 0;                                  ! No characters in output string
2     L_PTR = CH$PTR (LINE);                      ! Point to beginning of output string
2     DOING_BOLD = FALSE;                         ! Not doing a bold string
2     BOLD_CHAR = FALSE;                          ! Current character is not bold
2     DOING_ITALICS = FALSE;                      ! Not italicized string
2     ITALIC_CHAR = FALSE;                        ! Current character is not italic
2     OPEN_QUOTE = TRUE;                          ! Next '' is an open quote
2
2     I_LEN = .RNO_LEN;
```

```
;  2       I_PTR = CH$PLUS (.RNO_PTR, .RNO_LEN - 1);
;  2
;  2       DECR I FROM .RNO_LEN - 1 TO 0 DO
;  3           BEGIN
;  3           !
;  3           ! Remove trailing whitespace
;  3           !
;  3           CH = CH$RCHAR (.I_PTR);
;  3
;  3           IF (.CH NEQ %C' ') AND (.CH NEQ TAB) THEN EXITLOOP;
;  3
;  3           I_LEN = .I;
;  3           I_PTR = CH$PLUS (.I_PTR, -1);
;  2           END;
;  2
;  2       I_PTR = .RNO_PTR;
;  2
;  2       DECR I FROM .I_LEN TO 1 DO
;  2           !
;  2           ! Convert leading tabs to "/u"'s
;  2           !
;  2           IF CH$RCHAR_A (I_PTR) EQL TAB
;  2           THEN
;  3               BEGIN
;  3               CH$WCHAR_A (%C'/', L_PTR);
;  3               CH$WCHAR_A (%C'u', L_PTR);
;  3               L_LEN = .L_LEN + 2;
;  3               END
;  2           ELSE
;  3               BEGIN
;  3               I_LEN = .I;
;  3               I_PTR = CH$PLUS (.I_PTR, -1);          ! Back up to account for overshoot
;  3               EXITLOOP;
;  2               END;
;  2
;  2       LEADING_BLANKS = 0;
;  2       DECR I FROM .I_LEN TO 1 DO
;  2           !
;  2           ! Count the number of leading blanks
;  2           !
;  2           IF CH$RCHAR_A (I_PTR) EQL %C' '
;  2           THEN
;  2               LEADING_BLANKS = .LEADING_BLANKS + 1
;  2           ELSE
;  3               BEGIN
;  3               I_LEN = .I;
;  3               I_PTR = CH$PLUS (.I_PTR, -1);          ! Back up to account for overshoot
;  3               EXITLOOP;
;  2               END;
;  2
;  2       IF .LEADING_BLANKS
;  2       THEN
;  3           BEGIN
;  3           !
;  3           ! Odd number of leading blanks
;  3           !
;  3           I_LEN = .I_LEN + 1;
;  282         0560 3              I_PTR = CH$PLUS (.I_PTR, -1);
;  283         0561 3
;  284         0562 3              LEADING_BLANKS = .LEADING_BLANKS - 1;
;  285         0563 2              END;
;  286         0564 2
;  287         0565 2          INCR I FROM 1 TO .LEADING_BLANKS / 2 DO
;  288         0566 3              BEGIN
;  289         0567 3              !
;  290         0568 3              ! Insert indent sequence for each pair of leading blanks
;  291         0569 3              !
;  292         0570 3              CH$WCHAR_A (%C'/', L_PTR);
;  293         0571 3              CH$WCHAR_A (%C'm', L_PTR);
;  294         0572 3              L_LEN = .L_LEN + 2;
;  295         0573 2              END;
;  296         0574 2
;  297         0575 2          !
;  298         0576 2          ! Process text portion of line
;  299         0577 2          !
;  300         0578 2          INCR I FROM 1 TO .I_LEN DO
;  301         0579 3              BEGIN
;  302         0580 3              IF .L_LEN GEQ BUFFER_SIZE
;  303         0581 3              THEN
;  304         0582 4                  BEGIN
;  305         0583 4                  !
;  306         0584 4                  ! String too long for buffer
;  307         0585 4                  !
;  308       L 0586 4 %IF %BLISS (BLISS32)
;  309         0587 4 %THEN                                          ! Signal errors in BLISS32
;  310         0588 4
;  311         0589 4                  SIGNAL (INDEX$_TRUNCATED, 0, INDEX$_TEXTD, 2, .L_LEN, CH$PTR (LINE));
;  312         0590 4
;  313       U 0591 4 %ELSE                                          ! Use $XPO_PUT_MSG otherwise
;  314       U 0592 4
;  315       U 0593 4                  $XPO_PUT_MSG (SEVERITY = WARNING,
;  316       U 0594 4                      STRING = 'string too long - truncated',
;  317       U 0595 4                      STRING = $STR_CONCAT ('entry text: ', (.L_LEN, CH$PTR (LINE))));
;  318       U 0596 4
;  319         0597 4 %FI
;  320         0598 4
;  321         0599 4                  EXITLOOP;
;  322         0600 3                  END;
;  323         0601 3
;  324         0602 3              CH = CH$RCHAR_A (I_PTR);                ! Get next character
;  325         0603 3
;  326         0604 3              SELECTONE .CH OF
;  327         0605 3              SET
;  328         0606 3
;  329         0607 3              [%C'*']:
;  330         0608 3                  !
;  331         0609 3                  ! Bold next character
;  332         0610 3                  !
;  333         0611 3                  BOLD_CHAR = TRUE;
;  334         0612 3
;  335         0613 3              [%C'&']:
;  336         0614 3                  !
;  337         0615 3                  ! Next character is italic
;  338         0616 3                  !
;  339          0617  3                     ITALIC_CHAR = TRUE;
;  340          0618  3
;  341          0619  3                 [%C'%']:
;  342          0620  4                     BEGIN
;  343          0621  4                     !
;  344          0622  4                     ! Overstrike previous character
;  345          0623  4                     !
;  346        L 0624  4 %IF %BLISS (BLISS32)
;  347          0625  4 %THEN                                                   ! Signal errors for BLISS32
;  348          0626  4
;  349          0627  4                     SIGNAL (INDEX$_OVERSTRK, 0, INDEX$_TEXTD, 2, .RNO_LEN, .RNO_PTR);
;  350          0628  4
;  351        U 0629  4 %ELSE                                                   ! Use $XPO_PUT_MSG otherwise
;  352        U 0630  4
;  353        U 0631  4                     $XPO_PUT_MSG (SEVERITY = WARNING,
;  354        U 0632  4                         STRING = 'The following line contains an overstrike sequence',
;  355        U 0633  4                         STRING = $STR_CONCAT ('entry text: ', (.RNO_LEN, .RNO_PTR)));
;  356        U 0634  4
;  357          0635  4 %FI
;  358          0636  4
;  359          0637  4                     CH$WCHAR_A (%C'[', L_PTR);
;  360          0638  4                     CH$WCHAR_A (%C'e', L_PTR);
;  361          0639  4                     CH$WCHAR_A (%C'c', L_PTR);
;  362          0640  4                     CH$WCHAR_A (%C']', L_PTR);
;  363          0641  4                     L_LEN = .L_LEN + 4;
;  364          0642  3                     END;
;  365          0643  3
;  366          0644  3                 [OTHERWISE]:
;  367          0645  4                     BEGIN
;  368          0646  4                     !
;  369          0647  4                     ! A 'normal' character
;  370          0648  4                     !
;  371          0649  4                     IF .CH EQL %C'_'
;  372          0650  4                     THEN
;  373          0651  5                         BEGIN
;  374          0652  5                         !
;  375          0653  5                         ! Character is quoted.
;  376          0654  5                         ! Get character.
;  377          0655  5                         !
;  378          0656  5                         CH = CH$RCHAR_A (I_PTR);
;  379          0657  5                         I = .I + 1;
;  380          0658  4                         END;
;  381          0659  4
;  382          0660  4                     IF NOT .BOLD_CHAR
;  383          0661  4                     THEN
;  384          0662  5                         BEGIN
;  385          0663  5                         !
;  386          0664  5                         ! Do not bold this character
;  387          0665  5                         !
;  388          0666  5                         IF  .DOING_BOLD
;  389          0667  6                         AND (.CH NEQ %C' ')
;  390          0668  5                         THEN
;  391          0669  6                             BEGIN
;  392          0670  6                             !
;  393          0671  6                             ! Bold is turned on and the current character is non-blank
;  394          0672  6                             !
;  395          0673  6                             CH$WCHAR_A (%C'[', L_PTR);  ! Turn off bold
;  396          0674 6                      CH$WCHAR_A (%C'f', L_PTR);
;  397          0675 6                      CH$WCHAR_A (%C'r', L_PTR);
;  398          0676 6                      L_LEN = .L_LEN + 3;
;  399          0677 6
;  400          0678 6                      IF .DOING_ITALICS
;  401          0679 6                      THEN
;  402          0680 7                          BEGIN
;  403          0681 7                          !
;  404          0682 7                          ! Must turn italics off too on since both bold
;  405          0683 7                          ! and italics use the same termination sequence
;  406          0684 7                          !
;  407          0685 7                          CH$WCHAR_A (%C'f', L_PTR);
;  408          0686 7                          CH$WCHAR_A (%C'r', L_PTR);
;  409          0687 7                          L_LEN = .L_LEN + 2;
;  410          0688 7
;  411          0689 7                          IF .ITALIC_CHAR
;  412          0690 7                          THEN
;  413          0691 8                              BEGIN
;  414          0692 8                              !
;  415          0693 8                              ! This character is italicized.
;  416          0694 8                              ! Turn italics back on.
;  417          0695 8                              !
;  418          0696 8                              CH$WCHAR_A (%C'f', L_PTR);
;  419          0697 8                              CH$WCHAR_A (%C'i', L_PTR);
;  420          0698 8                              L_LEN = .L_LEN + 2;
;  421          0699 8                              END
;  422          0700 7                          ELSE
;  423          0701 7                              !
;  424          0702 7                              ! Character is not italicized.
;  425          0703 7                              ! Note that we've turned off italics
;  426          0704 7                              !
;  427          0705 7                              DOING_ITALICS = FALSE;
;  428          0706 6                          END;
;  429          0707 6
;  430          0708 6                      CH$WCHAR_A (%C']', L_PTR);
;  431          0709 6                      L_LEN = .L_LEN + 1;
;  432          0710 6
;  433          0711 6                      DOING_BOLD = FALSE;
;  434          0712 5                      END;
;  435          0713 5                  END
;  436          0714 4              ELSE
;  437          0715 5                  BEGIN
;  438          0716 5                  !
;  439          0717 5                  ! Bold next character
;  440          0718 5                  !
;  441          0719 5                  IF NOT .DOING_BOLD
;  442          0720 5                  THEN
;  443          0721 6                      BEGIN
;  444          0722 6                      !
;  445          0723 6                      ! Turn on bolding
;  446          0724 6                      !
;  447          0725 6                      CH$WCHAR_A (%C'[', L_PTR);
;  448          0726 6                      CH$WCHAR_A (%C'f', L_PTR);
;  449          0727 6                      CH$WCHAR_A (%C'b', L_PTR);
;  450          0728 6                      CH$WCHAR_A (%C']', L_PTR);
;  451          0729 6                      L_LEN = .L_LEN + 4;
;  452          0730 6
;  453      0731  6                     DOING_BOLD = TRUE;
;  454      0732  5                     END;
;  455      0733  5
;  456      0734  5                 BOLD_CHAR = FALSE;                  ! Reset bold character flag
;  457      0735  4                 END;
;  458      0736  4
;  459      0737  4             IF NOT .ITALIC_CHAR
;  460      0738  4             THEN
;  461      0739  5                 BEGIN
;  462      0740  5                 !
;  463      0741  5                 ! Do not italicize this character
;  464      0742  5                 !
;  465      0743  5                 IF  .DOING_ITALICS
;  466      0744  6                 AND (.CH NEQ %C' ')
;  467      0745  5                 THEN
;  468      0746  6                     BEGIN
;  469      0747  6                     !
;  470      0748  6                     ! Italics are turned on and the current character is non-blank
;  471      0749  6                     !
;  472      0750  6                     CH$WCHAR_A (%C'[', L_PTR);  ! Turn off italics
;  473      0751  6                     CH$WCHAR_A (%C'f', L_PTR);
;  474      0752  6                     CH$WCHAR_A (%C'r', L_PTR);
;  475      0753  6                     L_LEN = .L_LEN + 3;
;  476      0754  6
;  477      0755  6                     IF .DOING_BOLD
;  478      0756  6                     THEN
;  479      0757  7                         BEGIN
;  480      0758  7                         !
;  481      0759  7                         ! Must turn bold off and back on since both
;  482      0760  7                         ! bold and italics use the same termination sequence
;  483      0761  7                         !
;  484      0762  7                         CH$WCHAR_A (%C'f', L_PTR);
;  485      0763  7                         CH$WCHAR_A (%C'r', L_PTR);
;  486      0764  7                         CH$WCHAR_A (%C'f', L_PTR);
;  487      0765  7                         CH$WCHAR_A (%C'b', L_PTR);
;  488      0766  7                         L_LEN = .L_LEN + 4;
;  489      0767  6                         END;
;  490      0768  6
;  491      0769  6                     CH$WCHAR_A (%C']', L_PTR);
;  492      0770  6                     L_LEN = .L_LEN + 1;
;  493      0771  6
;  494      0772  6                     DOING_ITALICS = FALSE;
;  495      0773  5                     END;
;  496      0774  5                 END
;  497      0775  4             ELSE
;  498      0776  5                 BEGIN
;  499      0777  5                 !
;  500      0778  5                 ! Italicize next character
;  501      0779  5                 !
;  502      0780  5                 IF NOT .DOING_ITALICS
;  503      0781  5                 THEN
;  504      0782  6                     BEGIN
;  505      0783  6                     !
;  506      0784  6                     ! Turn on italics
;  507      0785  6                     !
;  508      0786  6                     CH$WCHAR_A (%C'[', L_PTR);
;  509      0787  6                     CH$WCHAR_A (%C'f', L_PTR);
; 510        0788 6                     CH$WCHAR_A (%C'i', L_PTR);
; 511        0789 6                     CH$WCHAR_A (%C']', L_PTR);
; 512        0790 6                     L_LEN = .L_LEN + 4;
; 513        0791 6
; 514        0792 6                     DOING_ITALICS = TRUE;
; 515        0793 5                     END;
; 516        0794 5
; 517        0795 5                 ITALIC_CHAR = FALSE;                ! Reset flag
; 518        0796 4                 END;
; 519        0797 4
; 520        0798 5             IF (.CH LSS %C' ') OR (.CH GTR %O'176')
; 521        0799 4             THEN
; 522        0800 5                 BEGIN
; 523        0801 5                 !
; 524        0802 5                 ! Character is a control character
; 525        0803 5                 !
; 526        0804 5                 IF .CH EQL TAB
; 527        0805 5                 THEN
; 528        0806 6                     BEGIN
; 529        0807 6                     !
; 530        0808 6                     ! TAB character
; 531        0809 6                     !
; 532        0810 6                     CH$WCHAR_A (%C'/', L_PTR);
; 533        0811 6                     CH$WCHAR_A (%C'u', L_PTR);
; 534        0812 6                     L_LEN = .L_LEN + 2;
; 535        0813 6                     END
; 536        0814 5                 ELSE
; 537        0815 6                     BEGIN
; 538        0816 6                     !
; 539        0817 6                     ! Other control characters are illegal
; 540        0818 6                     !
; 541      L 0819 6 %IF %BLISS (BLISS32)
; 542        0820 6 %THEN                                           ! Signal errors in BLISS32
; 543        0821 6
; 544        0822 6                     SIGNAL (INDEX$_CTRLCHAR, 0, INDEX$_TEXTD, 2, .RNO_LEN, .RNO_PTR);
; 545        0823 6
; 546      U 0824 6 %ELSE                                           ! Use $XPO_PUT_MSG otherwise
; 547      U 0825 6
; 548      U 0826 6                     $XPO_PUT_MSG (SEVERITY = WARNING,
; 549      U 0827 6                         STRING = 'the following line contains control characters - ignored',
; 550      U 0828 6                         STRING = $STR_CONCAT ('entry text: ', (.RNO_LEN, .RNO_PTR)));
; 551      U 0829 6
; 552        0830 6 %FI
; 553        0831 6
; 554        0832 5                     END;
; 555        0833 5                 END
; 556        0834 4             ELSE
; 557        0835 4                 SELECTONE .CH OF
; 558        0836 4                 SET
; 559        0837 4
; 560        0838 4                 [%C' ']:
; 561        0839 5                     BEGIN
; 562        0840 5                     CH$MOVE (5, CH$PTR (UPLIT ('*n10*')), .L_PTR);
; 563        0841 5                     L_PTR = CH$PLUS (.L_PTR, 5);
; 564        0842 5                     L_LEN = .L_LEN + 5;
; 565        0843 4                     END;
; 566        0844 4
;  567      0845  4                 [%C'-']:
;  568      0846  5                     BEGIN
;  569      0847  5                     CH$WCHAR_A (%C'+', L_PTR);
;  570      0848  5                     CH$WCHAR_A (%C'n', L_PTR);
;  571      0849  5                     L_LEN = .L_LEN + 2;
;  572      0850  4                     END;
;  573      0851  4
;  574      0852  4                 [%C'*']:
;  575      0853  5                     BEGIN
;  576      0854  5                     CH$WCHAR_A (%C'+', L_PTR);
;  577      0855  5                     CH$WCHAR_A (%C'a', L_PTR);
;  578      0856  5                     L_LEN = .L_LEN + 2;
;  579      0857  4                     END;
;  580      0858  4
;  581      0859  4                 [%C'=']:
;  582      0860  5                     BEGIN
;  583      0861  5                     CH$WCHAR_A (%C'+', L_PTR);
;  584      0862  5                     CH$WCHAR_A (%C'e', L_PTR);
;  585      0863  5                     L_LEN = .L_LEN + 2;
;  586      0864  4                     END;
;  587      0865  4
;  588      0866  4                 [%C'+']:
;  589      0867  5                     BEGIN
;  590      0868  5                     CH$WCHAR_A (%C'+', L_PTR);
;  591      0869  5                     CH$WCHAR_A (%C'p', L_PTR);
;  592      0870  5                     L_LEN = .L_LEN + 2;
;  593      0871  4                     END;
;  594      0872  4
;  595      0873  4                 [%C'\']:
;  596      0874  5                     BEGIN
;  597      0875  5                     CH$WCHAR_A (%C'+', L_PTR);
;  598      0876  5                     CH$WCHAR_A (%C's', L_PTR);
;  599      0877  5                     L_LEN = .L_LEN + 2;
;  600      0878  4                     END;
;  601      0879  4
;  602      0880  4                 [%C'@']:
;  603      0881  5                     BEGIN
;  604      0882  5                     CH$WCHAR_A (%C'+', L_PTR);
;  605      0883  5                     CH$WCHAR_A (%C't', L_PTR);
;  606      0884  5                     L_LEN = .L_LEN + 2;
;  607      0885  4                     END;
;  608      0886  4
;  609      0887  4                 [%C'/']:
;  610      0888  5                     BEGIN
;  611      0889  5                     CH$WCHAR_A (%C'+', L_PTR);
;  612      0890  5                     CH$WCHAR_A (%C'.', L_PTR);
;  613      0891  5                     L_LEN = .L_LEN + 2;
;  614      0892  4                     END;
;  615      0893  4
;  616      0894  4                 [%C'|']:
;  617      0895  5                     BEGIN
;  618      0896  5                     CH$WCHAR_A (%C'+', L_PTR);
;  619      0897  5                     CH$WCHAR_A (%C'v', L_PTR);
;  620      0898  5                     L_LEN = .L_LEN + 2;
;  621      0899  4                     END;
;  622      0900  4
;  623      0901  4                 [%C'{']:
```

```
;   624         0902  5                         BEGIN
;   625         0903  5                         CH$WCHAR_A (%C'+', L_PTR);
;   626         0904  5                         CH$WCHAR_A (%C'w', L_PTR);
;   627         0905  5                         L_LEN = .L_LEN + 2;
;   628         0906  4                         END;
;   629         0907  4
;   630         0908  4                     [%C'}']:
;   631         0909  5                         BEGIN
;   632         0910  5                         CH$WCHAR_A (%C'+', L_PTR);
;   633         0911  5                         CH$WCHAR_A (%C'x', L_PTR);
;   634         0912  5                         L_LEN = .L_LEN + 2;
;   635         0913  4                         END;
;   636         0914  4
;   637         0915  4                     [%C'<']:
;   638         0916  5                         BEGIN
;   639         0917  5                         CH$WCHAR_A (%C'+', L_PTR);
;   640         0918  5                         CH$WCHAR_A (%C'y', L_PTR);
;   641         0919  5                         L_LEN = .L_LEN + 2;
;   642         0920  4                         END;
;   643         0921  4
;   644         0922  4                     [%C'>']:
;   645         0923  5                         BEGIN
;   646         0924  5                         CH$WCHAR_A (%C'+', L_PTR);
;   647         0925  5                         CH$WCHAR_A (%C'z', L_PTR);
;   648         0926  5                         L_LEN = .L_LEN + 2;
;   649         0927  4                         END;
;   650         0928  4
;   651         0929  4                     [%C'[']:
;   652         0930  5                         BEGIN
;   653         0931  5                         CH$WCHAR_A (%C'+', L_PTR);
;   654         0932  5                         CH$WCHAR_A (%C'(', L_PTR);
;   655         0933  5                         L_LEN = .L_LEN + 2;
;   656         0934  4                         END;
;   657         0935  4
;   658         0936  4                     [%C']']:
;   659         0937  5                         BEGIN
;   660         0938  5                         CH$WCHAR_A (%C'+', L_PTR);
;   661         0939  5                         CH$WCHAR_A (%C')', L_PTR);
;   662         0940  5                         L_LEN = .L_LEN + 2;
;   663         0941  4                         END;
;   664         0942  4
;   665         0943  4                     [%C'''']:
;   666         0944  5                         BEGIN
;   667         0945  5                         IF .OPEN_QUOTE
;   668         0946  5                         THEN
;   669         0947  6                             BEGIN
;   670         0948  6                             !
;   671         0949  6                             ! Opening quote of quoted string
;   672         0950  6                             !
;   673         0951  6                             CH$WCHAR_A (%C'''', L_PTR);
;   674         0952  6                             CH$WCHAR_A (%C'''', L_PTR);
;   675         0953  6
;   676         0954  6                             OPEN_QUOTE = FALSE;     ! Next quote is not an open quote
;   677         0955  6                             END
;   678         0956  5                         ELSE
;   679         0957  6                             BEGIN
;   680         0958  6                             !
;  681      0959  6                         ! Closing quote
;  682      0960  6                         !
;  683      0961  6                         CH$WCHAR_A (%C'''', L_PTR);
;  684      0962  6                         CH$WCHAR_A (%C'''', L_PTR);
;  685      0963  6
;  686      0964  6                         OPEN_QUOTE = TRUE;        ! Next quote is open quote
;  687      0965  5                         END;
;  688      0966  5
;  689      0967  5                     L_LEN = .L_LEN + 2;
;  690      0968  4                     END;
;  691      0969  4
;  692      0970  4                 [OTHERWISE]:
;  693      0971  5                     BEGIN
;  694      0972  5                     !
;  695      0973  5                     ! A real normal character
;  696      0974  5                     !
;  697      0975  5                     CH$WCHAR_A (.CH, L_PTR);
;  698      0976  5                     L_LEN = .L_LEN + 1;
;  699      0977  4                     END;
;  700      0978  4
;  701      0979  4                 TES;
;  702      0980  4
;  703      0981  3             END;
;  704      0982  3
;  705      0983  3         TES;
;  706      0984  3
;  707      0985  2         END;
;  708      0986  2
;  709      0987  2     IF .DOING_BOLD OR .DOING_ITALICS
;  710      0988  2     THEN
;  711      0989  3         BEGIN
;  712      0990  3         !
;  713      0991  3         ! Turn off bold and italics
;  714      0992  3         !
;  715      0993  3         CH$WCHAR_A (%C'[', L_PTR);
;  716      0994  3         L_LEN = .L_LEN + 1;
;  717      0995  3
;  718      0996  3         IF .DOING_BOLD
;  719      0997  3         THEN
;  720      0998  4             BEGIN
;  721      0999  4             CH$WCHAR_A (%C'f', L_PTR);
;  722      1000  4             CH$WCHAR_A (%C'r', L_PTR);
;  723      1001  4             L_LEN = .L_LEN + 2;
;  724      1002  3             END;
;  725      1003  3
;  726      1004  3         IF .DOING_ITALICS
;  727      1005  3         THEN
;  728      1006  4             BEGIN
;  729      1007  4             CH$WCHAR_A (%C'f', L_PTR);
;  730      1008  4             CH$WCHAR_A (%C'r', L_PTR);
;  731      1009  4             L_LEN = .L_LEN + 2;
;  732      1010  3             END;
;  733      1011  3
;  734      1012  3         CH$WCHAR_A (%C']', L_PTR);
;  735      1013  3         L_LEN = .L_LEN + 1;
;  736      1014  2         END;
;  737      1015  2
;  738          1016  2       IF NOT .OPEN_QUOTE
;  739          1017  2       THEN
;  740          1018  2           !
;  741          1019  2           ! Saw an open quote but no close quote
;  742          1020  2           !
;  743        L 1021  2  %IF %BLISS (BLISS32)
;  744          1022  2  %THEN                                       ! Signal errors for BLISS32
;  745          1023  2
;  746          1024  2           SIGNAL (INDEX$_CLOSEQUOT, 0, INDEX$_TEXTD, 2, .RNO_LEN, .RNO_PTR);
;  747          1025  2
;  748        U 1026  2  %ELSE                                       ! Use $XPO_PUT_MSG otherwise
;  749        U 1027  2
;  750        U 1028  2           $XPO_PUT_MSG (SEVERITY = WARNING,
;  751        U 1029  2               STRING = 'missing close quote',
;  752        U 1030  2               STRING = $STR_CONCAT ('entry text: ', (.RNO_LEN, .RNO_PTR)));
;  753        U 1031  2
;  754          1032  2  %FI
;  755          1033  2
;  756          1034  2       $STR_COPY (STRING = (.L_LEN, CH$PTR (LINE)), TARGET = .DSC);
;  757          1035  1       END;


                                                                   .TITLE  NDXTMS NDXTMS -- RUNOFF to TMS-11 conversion
                                                                   .IDENT  \V04-000\

                                                                   .PSECT  $PLIT$,NOWRT,NOEXE,2

                         00  00  00  2A  30  31  6E  2A  00000 P.AAA:  .ASCII  \*n10*\<0><0><0>                         ;

                                                                   .PSECT  $OWN$,NOEXE,2

                                                0000  00000 OLD_FILE:
                                                                   .WORD   0                                         ;
                                              02  0E  00002        .BYTE   14, 2                                     ;
                                            00000000  00004        .LONG   0                                         ;
                                            00000000  00008 TMSCHR: .LONG  0                                         ;
                                            00000000  0000C FILE_NO:.LONG  0                                         ;

                                                                   .PSECT  $GLOBAL$,NOEXE,2

                                                0000  00000 TMSTOF::.WORD  0                                         ;
                                              02  0E  00002        .BYTE   14, 2                                     ;
                                            00000000  00004        .LONG   0                                         ;
                                            00000028  00008 TMSSIZ::.LONG  40                                        ;
                                                      0000C CHRSIZ::.BLKB  4
                                           00000000#  00010 CHRSZA::.LONG  0[32]                                     ;
0000001E  00000012  00000012  00000014  0000000E  0000000D  00090        .LONG   13, 14, 20, 18, 18, 30, 28, 10, 14, 14, -  ;
00000018  00000012  0000000E  0000000E  0000000A  0000001C  000A8                18, 24, 11, 18, 11, 12                    ;
                    0000000C  0000000B  00000012  0000000B  000C0                                                          ;
                                           00000012#  000D0        .LONG   18[10]                                    ;
00000012  00000018  00000018  00000018  0000000C  0000000C  000F8        .LONG   12, 12, 24, 24, 24, 18, 30, 26, 26, 26, -  ;
0000001A  0000001C  0000001A  0000001A  0000001A  0000001E  00110                28, 26, 23, 28, 30, 13, 19, 30, 24, 36, -  ;
0000001E  00000013  0000000D  0000001E  0000001C  00000017  00128                30, 28, 24, 28, 26, 23, 26, 28, 26, 36, -  ;
0000001C  00000018  0000001C  0000001E  00000024  00000018  00140                30, 26, 24, 10, 18, 10, 19, 26, 19, 19, -  ;
00000024  0000001A  0000001C  0000001A  00000017  0000001A  00158                21, 17, 21, 17, 12, 18, 21, 11, 11, 20, -  ;
0000000A  00000012  0000000A  00000018  0000001A  0000001E  00170                11, 32, 21, 18, 21, 20, 14, 15, 14, 21, -  ;
00000011  00000015  00000013  00000013  0000001A  00000013  00188                19, 26, 19, 19, 17, 11, 9, 11, 19, 0       ;
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```
0000000B  00000015  00000012  0000000C  00000011  00000015  001A0
00000012  00000015  00000020  0000000B  00000014  0000000B  001B8
00000015  0000000E  0000000F  0000000E  00000014  00000015  001D0
0000000B  00000011  00000013  00000013  0000001A  00000013  001E8
                    00000000  00000013  0000000B  00000009  00200
                                                  00000000# 00210          .LONG   0[128]
                                                  00000000# 00410 CHRSZE::.LONG   0[32]
00000020  00000014  0000001C  0000000C  0000000C  0000000D  00490          .LONG   13, 12, 12, 28, 20, 32, 26, 12, 10, 10, -
00000020  00000010  0000000A  0000000A  0000000C  0000001A  004A8                  16, 32, 12, 20, 12, 10
                    0000000A  0000000C  00000014  0000000C  004C0
                                                  00000014# 004D0          .LONG   20[10]
0000000E  0000001E  00000024  0000001E  0000000C  0000000C  004F8          .LONG   12, 12, 30, 36, 30, 14, 36, 24, 22, 24, -
00000012  0000001C  00000018  00000016  00000018  00000024  00510                  28, 18, 18, 28, 28, 10, 10, 22, 18, 32, -
00000016  0000000A  0000000A  0000001C  0000001C  00000012  00528                  28, 30, 20, 30, 22, 18, 20, 28, 24, 36, -
0000001E  00000014  0000001E  0000001C  00000020  00000012  00540                  22, 22, 22, 12, 12, 12, 12, 20, 12, 18, -
00000024  00000018  0000001C  00000014  00000012  00000016  00558                  20, 18, 20, 18, 10, 18, 20, 10, 10, 18, -
0000000C  0000000C  0000000C  00000016  00000016  00000016  00570                  10, 30, 20, 20, 20, 20, 12, 14, 10, 20, -
00000012  00000014  00000012  0000000C  00000014  0000000C  00588                  18, 28, 18, 18, 18, 12, 8, 12, 12, 0
0000000A  00000014  00000012  0000000A  00000012  00000014  005A0
00000014  00000014  0000001E  0000000A  00000012  0000000A  005B8
00000014  0000000A  0000000E  0000000C  00000014  00000014  005D0
0000000C  00000012  00000012  00000012  0000001C  00000012  005E8
                    00000000  0000000C  0000000C  00000008  00600
                                                  00000000# 00610          .LONG   0[128]

                                                                  TMSSTD==                20
                                                                  MSPACE==                32
                                                                           .EXTRN  DSRINDEX$_BADLOGIC
                                                                           .EXTRN  DSRINDEX$_BADVALUE
                                                                           .EXTRN  DSRINDEX$_INSVIRMEM
                                                                           .EXTRN  DSRINDEX$_LINELENG
                                                                           .EXTRN  DSRINDEX$_NOREF
                                                                           .EXTRN  DSRINDEX$_OPENIN
                                                                           .EXTRN  DSRINDEX$_OPENOUT
                                                                           .EXTRN  DSRINDEX$_TOOMANY
                                                                           .EXTRN  DSRINDEX$_VALERR
                                                                           .EXTRN  DSRINDEX$_CANTBAL
                                                                           .EXTRN  DSRINDEX$_CLOSEQUOT
                                                                           .EXTRN  DSRINDEX$_CONFQUAL
                                                                           .EXTRN  DSRINDEX$_CTRLCHAR
                                                                           .EXTRN  DSRINDEX$_DOESNTFIT
                                                                           .EXTRN  DSRINDEX$_DUPBEGIN
                                                                           .EXTRN  DSRINDEX$_EMPTYIN
                                                                           .EXTRN  DSRINDEX$_IGNORED
                                                                           .EXTRN  DSRINDEX$_INVINPUT
                                                                           .EXTRN  DSRINDEX$_INVRECORD
                                                                           .EXTRN  DSRINDEX$_LASTCONT
                                                                           .EXTRN  DSRINDEX$_NOBEGIN
                                                                           .EXTRN  DSRINDEX$_NOEND
                                                                           .EXTRN  DSRINDEX$_NOINDEX
                                                                           .EXTRN  DSRINDEX$_NOLIST
                                                                           .EXTRN  DSRINDEX$_OVERSTRK
                                                                           .EXTRN  DSRINDEX$_SKIPPED
                                                                           .EXTRN  DSRINDEX$_SYNTAX
                                                                           .EXTRN  DSRINDEX$_TEXFILE
                                                                           .EXTRN  DSRINDEX$_TOODEEP
                                                                           .EXTRN  DSRINDEX$_TOOFEW
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                                                   .EXTRN  DSRINDEX$_TRUNCATED
                                                   .EXTRN  DSRINDEX$_COMPLETE
                                                   .EXTRN  DSRINDEX$_CREATED
                                                   .EXTRN  DSRINDEX$_IDENT
                                                   .EXTRN  DSRINDEX$_PROCFILE
                                                   .EXTRN  DSRINDEX$_TEXT, DSRINDEX$_TEXTD
                                                   .EXTRN  DSRINDEX$_TMS11
                                                   .EXTRN  TAB, OPEN_ERROR
                                                   .EXTRN  XST$COPY, STR$FAILURE

                                                   .PSECT  $CODE$,NOWRT,2

                               0FFC 00000          .ENTRY  RNOTMS, Save R2,R3,R4,R5,R6,R7,R8,R9,R10,-       ; 0448
                                                           R11                                              ;
                5E       F7F0   CE   9E 00002      MOVAB   -2064(SP), SP                                    ;
                                58   D4 00007      CLRL    L_LEN                                            ; 0494
                57         0C   AE   9E 00009      MOVAB   LINE, L_PTR                                      ; 0495
                                7E   7C 0000D      CLRQ    BOLD_CHAR                                        ; 0497
                                7E   7C 0000F      CLRQ    ITALIC_CHAR                                      ; 0499
                                01   DD 00011      PUSHL   #1                                               ; 0500
                56         04   AC   D0 00013      MOVL    RNO_LEN, I_LEN                                   ; 0502
                5A         08   AC   D0 00017      MOVL    RNO_PTR, R10                                     ; 0503
 50       04    AC              01   C3 0001B      SUBL3   #1, RNO_LEN, R0                                  ;
 5B             5A              50   C1 00020      ADDL3   R0, R10, I_PTR                                   ;
                50         04   AC   D0 00024      MOVL    RNO_LEN, I                                       ; 0505
                                16   11 00028      BRB     3$                                               ;
                59              6B   9A 0002A 1$:  MOVZBL  (I_PTR), CH                                      ; 0510
                20              59   D1 0002D      CMPL    CH, #32                                          ; 0512
                                09   13 00030      BEQL    2$                                               ;
     00000000G  8F              59   D1 00032      CMPL    CH, #TAB                                         ;
                                08   12 00039      BNEQ    4$                                               ;
                56              50   D0 0003B 2$:  MOVL    I, I_LEN                                         ; 0514
                                5B   D7 0003E      DECL    I_PTR                                            ; 0515
                E7              50   F4 00040 3$:  SOBGEQ  I, 1$                                            ; 0505
                5B              5A   D0 00043 4$:  MOVL    R10, I_PTR                                       ; 0518
                50         01   A6   9E 00046      MOVAB   1(R6), I                                         ; 0520
                                1D   11 0004A      BRB     7$                                               ;
                51              8B   9A 0004C 5$:  MOVZBL  (I_PTR)+, R1                                     ; 0524
     00000000G  8F              51   D1 0004F      CMPL    R1, #TAB                                         ;
                                0A   12 00056      BNEQ    6$                                               ;
                87       752F   8F   B0 00058      MOVW    #29999, (L_PTR)+                                 ; 0527
                58              02   C0 0005D      ADDL2   #2, L_LEN                                        ; 0529
                                07   11 00060      BRB     7$                                               ; 0524
                56              50   D0 00062 6$:  MOVL    I, I_LEN                                         ; 0533
                                5B   D7 00065      DECL    I_PTR                                            ; 0534
                                03   11 00067      BRB     8$                                               ; 0532
                E0              50   F5 00069 7$:  SOBGTR  I, 5$                                            ; 0524
                                51   D4 0006C 8$:  CLRL    LEADING_BLANKS                                   ; 0538
                50         01   A6   9E 0006E      MOVAB   1(R6), I                                         ; 0539
                                13   11 00072      BRB     11$                                              ;
                52              8B   9A 00074 9$:  MOVZBL  (I_PTR)+, R2                                     ; 0543
                20              52   91 00077      CMPB    R2, #32                                          ;
                                04   12 0007A      BNEQ    10$                                              ;
                                51   D6 0007C      INCL    LEADING_BLANKS                                   ; 0545
                                07   11 0007E      BRB     11$                                              ;
                56              50   D0 00080 10$: MOVL    I, I_LEN                                         ; 0548
                                5B   D7 00083      DECL    I_PTR                                            ; 0549
```

```
                                     03 11 00085          BRB     12$                           ; 0547
                      EA             50 F5 00087 11$:     SOBGTR  I, 9$                         ; 0543
                      06             51 E9 0008A 12$:     BLBC    LEADING_BLANKS, 13$           ; 0553
                                     56 D6 0008D          INCL    I_LEN                         ; 0559
                                     5B D7 0008F          DECL    I_PTR                         ; 0560
                                     51 D7 00091          DECL    LEADING_BLANKS                ; 0562
                      51             02 C6 00093 13$:     DIVL2   #2, R1                        ; 0565
                                     50 D4 00096          CLRL    I                             ;
                                     08 11 00098          BRB     15$                           ;
                      87      6D2F   8F B0 0009A 14$:     MOVW    #27951, (L_PTR)+              ; 0570
                      58             02 C0 0009F          ADDL2   #2, L_LEN                     ; 0572
         F4           50             51 F3 000A2 15$:     AOBLEQ  R1, I, 14$                    ; 0565
                                14   AE D4 000A6          CLRL    I                             ; 0578
                                     6C 11 000A9          BRB     20$                           ;
            000007D0  8F             58 D1 000AB 16$:     CMPL    L_LEN, #2000                  ; 0580
                                     1F 19 000B2          BLSS    17$                           ;
                                20   AE 9F 000B4          PUSHAB  LINE                          ; 0589
                                     58 DD 000B7          PUSHL   L_LEN                         ;
                                     02 DD 000B9          PUSHL   #2                            ;
                         00000000G   8F DD 000BB          PUSHL   #DSRINDEX$_TEXTD              ;
                                     7E D4 000C1          CLRL    -(SP)                         ;
                         00000000G   8F DD 000C3          PUSHL   #DSRINDEX$_TRUNCATED          ;
           00000000G  00             06 FB 000C9          CALLS   #6, LIB$SIGNAL                ;
                                   025C 31 000D0          BRW     62$                           ; 0582
                      59             8B 9A 000D3 17$:     MOVZBL  (I_PTR)+, CH                  ; 0602
                      2A             59 D1 000D6          CMPL    CH, #42                       ; 0607
                                     06 12 000D9          BNEQ    18$                           ;
                  0C  AE             01 D0 000DB          MOVL    #1, BOLD_CHAR                 ; 0611
                                     36 11 000DF          BRB     20$                           ;
                      26             59 D1 000E1 18$:     CMPL    CH, #38                       ; 0613
                                     06 12 000E4          BNEQ    19$                           ;
                  04  AE             01 D0 000E6          MOVL    #1, ITALIC_CHAR               ; 0617
                                     2B 11 000EA          BRB     20$                           ;
                      25             59 D1 000EC 19$:     CMPL    CH, #37                       ; 0619
                                     29 12 000EF          BNEQ    21$                           ;
                                     5A DD 000F1          PUSHL   R10                           ; 0627
                                04   AC DD 000F3          PUSHL   RNO_LEN                       ;
                                     02 DD 000F6          PUSHL   #2                            ;
                         00000000G   8F DD 000F8          PUSHL   #DSRINDEX$_TEXTD              ;
                                     7E D4 000FE          CLRL    -(SP)                         ;
                         00000000G   8F DD 00100          PUSHL   #DSRINDEX$_OVERSTRK           ;
           00000000G  00             06 FB 00106          CALLS   #6, LIB$SIGNAL                ;
                      87  5D63655B   8F D0 0010D          MOVL    #1566795099, (L_PTR)+         ; 0637
                      58             04 C0 00114          ADDL2   #4, L_LEN                     ; 0641
                                   020E 31 00117 20$:     BRW     61$                           ; 0604
            0000005F  8F             59 D1 0011A 21$:     CMPL    CH, #95                       ; 0649
                                     06 12 00121          BNEQ    22$                           ;
                      59             8B 9A 00123          MOVZBL  (I_PTR)+, CH                  ; 0656
                                14   AE D6 00126          INCL    I                             ; 0657
                      3D        0C   AE E8 00129 22$:     BLBS    BOLD_CHAR, 25$                ; 0660
                      4E        10   AE E9 0012D          BLBC    DOING_BOLD, 27$               ; 0666
                      20             59 D1 00131          CMPL    CH, #32                       ; 0667
                      49                13 00134          BEQL    27$                           ;
                      87      665B   8F B0 00136          MOVW    #26203, (L_PTR)+              ; 0673
                      87        72   8F 90 0013B          MOVB    #114, (L_PTR)+                ; 0675
                      58             03 C0 0013F          ADDL2   #3, L_LEN                     ; 0676
                      19        08   AE E9 00142          BLBC    DOING_ITALICS, 24$            ; 0678
```

```
             87      7266   8F B0 00146       MOVW    #29286, (L_PTR)+              ; 0685
             58              02 C0 0014B       ADDL2   #2, L_LEN                     ; 0687
             0A        04   AE E9 0014E       BLBC    ITALIC_CHAR, 23$              ; 0689
             87      6966   8F B0 00152       MOVW    #26982, (L_PTR)+              ; 0696
             58              02 C0 00157       ADDL2   #2, L_LEN                     ; 0698
                            03 11 0015A       BRB     24$                           ; 0689
                       08   AE D4 0015C 23$:  CLRL    DOING_ITALICS                 ; 0705
             87        5D   8F 90 0015F 24$:  MOVB    #93, (L_PTR)+                 ; 0708
                            58 D6 00163       INCL    L_LEN                         ; 0709
                       10   AE D4 00165       CLRL    DOING_BOLD                    ; 0711
                            15 11 00168       BRB     27$                           ; 0660
             0E        10   AE E8 0016A 25$:  BLBS    DOING_BOLD, 26$               ; 0719
             87  5D62665B   8F D0 0016E       MOVL    #1566729819, (L_PTR)+         ; 0725
             58              04 C0 00175       ADDL2   #4, L_LEN                     ; 0729
          10 AE              01 D0 00178       MOVL    #1, DOING_BOLD                ; 0731
                       0C   AE D4 0017C 26$:  CLRL    BOLD_CHAR                     ; 0734
             2E        04   AE E8 0017F 27$:  BLBS    ITALIC_CHAR, 29$              ; 0737
             3F        08   AE E9 00183       BLBC    DOING_ITALICS, 31$            ; 0743
             20              59 D1 00187       CMPL    CH, #32                       ; 0744
                            3A 13 0018A       BEQL    31$                           ;
             87      665B   8F B0 0018C       MOVW    #26203, (L_PTR)+              ; 0750
             87        72   8F 90 00191       MOVB    #114, (L_PTR)+                ; 0752
             58              03 C0 00195       ADDL2   #3, L_LEN                     ; 0753
             0A        10   AE E9 00198       BLBC    DOING_BOLD, 28$               ; 0755
             87  62667266   8F D0 0019C       MOVL    #1650881126, (L_PTR)+         ; 0762
             58              04 C0 001A3       ADDL2   #4, L_LEN                     ; 0766
             87        5D   8F 90 001A6 28$:  MOVB    #93, (L_PTR)+                 ; 0769
                            58 D6 001AA       INCL    L_LEN                         ; 0770
                       08   AE D4 001AC       CLRL    DOING_ITALICS                 ; 0772
                            15 11 001AF       BRB     31$                           ; 0737
             0E        08   AE E8 001B1 29$:  BLBS    DOING_ITALICS, 30$            ; 0780
             87  5D69665B   8F D0 001B5       MOVL    #1567188571, (L_PTR)+         ; 0786
             58              04 C0 001BC       ADDL2   #4, L_LEN                     ; 0790
          08 AE              01 D0 001BF       MOVL    #1, DOING_ITALICS             ; 0792
                       04   AE D4 001C3 30$:  CLRL    ITALIC_CHAR                   ; 0795
             20              59 D1 001C6 31$:  CMPL    CH, #32                       ; 0798
                            09 19 001C9       BLSS    32$                           ;
    0000007E 8F              59 D1 001CB       CMPL    CH, #126                      ;
                            31 15 001D2       BLEQ    34$                           ;
   00000000G 8F              59 D1 001D4 32$:  CMPL    CH, #TAB                      ; 0804
                            0A 12 001DB       BNEQ    33$                           ;
             87              2F 90 001DD       MOVB    #47, (L_PTR)+                 ; 0810
             67        75   8F 90 001E0       MOVB    #117, (L_PTR)                 ; 0811
                          0084 31 001E4       BRW     41$                           ;
                            5A DD 001E7 33$:  PUSHL   R10                           ; 0822
                       04   AC DD 001E9       PUSHL   RNO_LEN                       ;
                            02 DD 001EC       PUSHL   #2                            ;
                00000000G   8F DD 001EE       PUSHL   #DSRINDEX$_TEXTD              ;
                            7E D4 001F4       CLRL    -(SP)                         ;
                00000000G   8F DD 001F6       PUSHL   #DSRINDEX$_CTRLCHAR           ;
   00000000G 00              06 FB 001FC       CALLS   #6, LIB$SIGNAL                ;
                            17 11 00203       BRB     35$                           ; 0798
    0000005F 8F              59 D1 00205 34$:  CMPL    CH, #95                       ; 0838
                            11 12 0020C       BNEQ    36$                           ;
67 00000000' EF              05 28 0020E       MOVC3   #5, P.AAA, (L_PTR)            ; 0840
             57              05 C0 00216       ADDL2   #5, L_PTR                     ; 0841
             58              05 C0 00219       ADDL2   #5, L_LEN                     ; 0842
```

```
                             0109  31 0021C 35$:   BRW    61$                    ; 0835
           2D                  59  D1 0021F 36$:   CMPL   CH, #45                ; 0845
                               0A  12 00222        BNEQ   37$
           87                  2B  90 00224        MOVB   #43, (L_PTR)+          ; 0847
           67       6E         8F  90 00227        MOVB   #110, (L_PTR)          ; 0848
                             0081  31 0022B        BRW    46$
           2A                  59  D1 0022E 37$:   CMPL   CH, #42                ; 0852
                               0A  12 00231        BNEQ   38$
           87                  2B  90 00233        MOVB   #43, (L_PTR)+          ; 0854
           67       61         8F  90 00236        MOVB   #97, (L_PTR)           ; 0855
                             0084  31 0023A        BRW    48$
           3D                  59  D1 0023D 38$:   CMPL   CH, #61                ; 0859
                               0A  12 00240        BNEQ   39$
           87                  2B  90 00242        MOVB   #43, (L_PTR)+          ; 0861
           67       65         8F  90 00245        MOVB   #101, (L_PTR)          ; 0862
                             0083  31 00249        BRW    50$
           2B                  59  D1 0024C 39$:   CMPL   CH, #43                ; 0866
                               0A  12 0024F        BNEQ   40$
           87                  2B  90 00251        MOVB   #43, (L_PTR)+          ; 0868
           67       70         8F  90 00254        MOVB   #112, (L_PTR)          ; 0869
                             0082  31 00258        BRW    52$
0000005C   8F                  59  D1 0025B 40$:   CMPL   CH, #92                ; 0873
                               0A  12 00262        BNEQ   42$
           87                  2B  90 00264        MOVB   #43, (L_PTR)+          ; 0875
           67       73         8F  90 00267        MOVB   #115, (L_PTR)          ; 0876
                             0080  31 0026B 41$:   BRW    54$
00000040   8F                  59  D1 0026E 42$:   CMPL   CH, #64                ; 0880
                               09  12 00275        BNEQ   43$
           87                  2B  90 00277        MOVB   #43, (L_PTR)+          ; 0882
           67       74         8F  90 0027A        MOVB   #116, (L_PTR)          ; 0883
                               7F  11 0027E        BRB    56$
           2F                  59  D1 00280 43$:   CMPL   CH, #47                ; 0887
                               08  12 00283        BNEQ   44$
           87                  2B  90 00285        MOVB   #43, (L_PTR)+          ; 0889
           67                  2E  90 00288        MOVB   #46, (L_PTR)           ; 0890
                               72  11 0028B        BRB    56$
0000007C   8F                  59  D1 0028D 44$:   CMPL   CH, #124               ; 0894
                               09  12 00294        BNEQ   45$
           87                  2B  90 00296        MOVB   #43, (L_PTR)+          ; 0896
           67       76         8F  90 00299        MOVB   #118, (L_PTR)          ; 0897
                               7D  11 0029D        BRB    59$
0000007B   8F                  59  D1 0029F 45$:   CMPL   CH, #123               ; 0901
                               09  12 002A6        BNEQ   47$
           87                  2B  90 002A8        MOVB   #43, (L_PTR)+          ; 0903
           67       77         8F  90 002AB        MOVB   #119, (L_PTR)          ; 0904
                               6B  11 002AF 46$:   BRB    59$
0000007D   8F                  59  D1 002B1 47$:   CMPL   CH, #125               ; 0908
                               09  12 002B8        BNEQ   49$
           87                  2B  90 002BA        MOVB   #43, (L_PTR)+          ; 0910
           67       78         8F  90 002BD        MOVB   #120, (L_PTR)          ; 0911
                               59  11 002C1 48$:   BRB    59$
           3C                  59  D1 002C3 49$:   CMPL   CH, #60                ; 0915
                               09  12 002C6        BNEQ   51$
           87                  2B  90 002C8        MOVB   #43, (L_PTR)+          ; 0917
           67       79         8F  90 002CB        MOVB   #121, (L_PTR)          ; 0918
                               4B  11 002CF 50$:   BRB    59$
           3E                  59  D1 002D1 51$:   CMPL   CH, #62                ; 0922
```

```
                                 09  12 002D4        BNEQ    53$                                      ;
                       87        2B  90 002D6        MOVB    #43, (L_PTR)+                            ; 0924
                       67    7A  8F  90 002D9        MOVB    #122, (L_PTR)                            ; 0925
                                 3D  11 002DD 52$:   BRB     59$                                      ;
             0000005B  8F        59  D1 002DF 53$:   CMPL    CH, #91                                  ; 0929
                                 08  12 002E6        BNEQ    55$                                      ;
                       87        2B  90 002E8        MOVB    #43, (L_PTR)+                            ; 0931
                       67        28  90 002EB        MOVB    #40, (L_PTR)                             ; 0932
                                 2C  11 002EE 54$:   BRB     59$                                      ;
             0000005D  8F        59  D1 002F0 55$:   CMPL    CH, #93                                  ; 0936
                                 08  12 002F7        BNEQ    57$                                      ;
                       87        2B  90 002F9        MOVB    #43, (L_PTR)+                            ; 0938
                       67        29  90 002FC        MOVB    #41, (L_PTR)                             ; 0939
                                 1B  11 002FF 56$:   BRB     59$                                      ;
                       22        59  D1 00301 57$:   CMPL    CH, #34                                  ; 0943
                                 1D  12 00304        BNEQ    60$                                      ;
                       0A        6E  E9 00306        BLBC    OPEN_QUOTE, 58$                          ; 0945
                       87        22  90 00309        MOVB    #34, (L_PTR)+                            ; 0951
                       67        22  90 0030C        MOVB    #34, (L_PTR)                             ; 0952
                                 6E  D4 0030F        CLRL    OPEN_QUOTE                               ; 0954
                                 09  11 00311        BRB     59$                                      ; 0945
                       87        27  90 00313 58$:   MOVB    #39, (L_PTR)+                            ; 0961
                       67        27  90 00316        MOVB    #39, (L_PTR)                             ; 0962
                       6E        01  D0 00319        MOVL    #1, OPEN_QUOTE                           ; 0964
                                 57  D6 0031C 59$:   INCL    L_PTR                                    ; 0952
                       58        02  C0 0031E        ADDL2   #2, L_LEN                                ; 0967
                                 05  11 00321        BRB     61$                                      ; 0835
                       87        59  90 00323 60$:   MOVB    CH, (L_PTR)+                             ; 0975
                                 58  D6 00326        INCL    L_LEN                                    ; 0976
   FD7C      14   AE   01        56  F1 00328 61$:   ACBL    I_LEN, #1, I, 16$                        ; 0578
                       04    10  AE  E8 0032F 62$:   BLBS    DOING_BOLD, 63$                          ; 0987
                       24    08  AE  E9 00333        BLBC    DOING_ITALICS, 66$                       ;
                       87    5B  8F  90 00337 63$:   MOVB    #91, (L_PTR)+                            ; 0993
                                 58  D6 0033B        INCL    L_LEN                                    ; 0994
                       08    10  AE  E9 0033D        BLBC    DOING_BOLD, 64$                          ; 0996
                       87  7266  8F  B0 00341        MOVW    #29286, (L_PTR)+                         ; 0999
                       58        02  C0 00346        ADDL2   #2, L_LEN                                ; 1001
                       08    08  AE  E9 00349 64$:   BLBC    DOING_ITALICS, 65$                       ; 1004
                       87  7266  8F  B0 0034D        MOVW    #29286, (L_PTR)+                         ; 1007
                       58        02  C0 00352        ADDL2   #2, L_LEN                                ; 1009
                       87    5D  8F  90 00355 65$:   MOVB    #93, (L_PTR)+                            ; 1012
                                 58  D6 00359        INCL    L_LEN                                    ; 1013
                       1C        6E  E8 0035B 66$:   BLBS    OPEN_QUOTE, 67$                          ; 1016
                                 5A  DD 0035E        PUSHL   R10                                      ; 1024
                             04  AC  DD 00360        PUSHL   RNO_LEN                                  ;
                                 02  DD 00363        PUSHL   #2                                       ;
                      00000000G  8F  DD 00365        PUSHL   #DSRINDEX$_TEXTD                         ;
                                 7E  D4 0036B        CLRL    -(SP)                                    ;
                      00000000G  8F  DD 0036D        PUSHL   #DSRINDEX$_CLOSEQUOT                     ;
             00000000G 00        06  FB 00373        CALLS   #6, LIB$SIGNAL                           ;
                    18 AE        58  B0 0037A 67$:   MOVW    L_LEN, $STR$STRING                       ; 1034
                    1A AE        0E  90 0037E        MOVB    #14, $STR$STRING+2                       ;
                    1B AE        01  90 00382        MOVB    #1, $STR$STRING+3                        ;
                    1C AE    20  AE  9E 00386        MOVAB   LINE, $STR$STRING+4                      ;
                      00000000G  EF  9F 0038B        PUSHAB  STR$FAILURE                              ;
                                 7E  D4 00391        CLRL    -(SP)                                    ;
                             0C  AC  DD 00393        PUSHL   DSC                                      ;
```

```
                        24    AE  9F 00396          PUSHAB  $STR$STRING                          ;
                              7E  D4 00399          CLRL    -(SP)                                ;
          00000000G  EF       05  FB 0039B          CALLS   #5, XST$COPY                         ;
                                  04 003A2          RET                                          ; 1035

; Routine Size:  931 bytes,    Routine Base:  $CODE$ + 0000
```

```
1 %SBTTL 'GLOBAL ROUTINE TMSPUT -- Write a line to output file'
1 GLOBAL ROUTINE TMSPUT (LEN, PTR, IOB, IDEAL) : NOVALUE =
1 !++
1 !
1 ! FUNCTIONAL DESCRIPTION:
1 !
1 !       This routine is called to write a line to the output file.
1 !
1 !       If the output file is TMSSIZ blocks, and IDEAL
1 !       is TRUE, creates a new output file before writing line.
1 !
1 !       If the output file is TMSSIZ + 10 blocks, creates
1 !       a new output file unconditionally.
1 !
1 !       New output file names are of the form
1 !               {first 3 characters of original file name}{3 digits}.TMS
1 !
1 ! FORMAL PARAMETERS:
1 !
1 !       LEN     - Length of line
1 !       PTR     - CH$PTR to line
1 !       IOB     - Address of IOB
1 !       IDEAL   - TRUE if file can be broken on this line
1 !
1 ! IMPLICIT INPUTS:
1 !
1 !       TMSCHR  - Number of characters written to output file
1 !       TMSSIZ  - Ideal file size in blocks
1 !
1 ! IMPLICIT OUTPUTS:
1 !
1 !       TMSCHR  - Number of characters written to output file
1 !
1 ! ROUTINE VALUE:
1 ! COMPLETION CODES:
1 !
1 !       None
1 !
1 ! SIDE EFFECTS:
1 !
1 !       None
1 !
1 !--
2     BEGIN
2     MAP
2         IOB : REF $XPO_IOB ();
3     IF ((.TMSCHR GEQ (.TMSSIZ * 512)) AND .IDEAL)       ! Best place to start a new file
3     OR  (.TMSCHR GEQ (.TMSSIZ * 512 + 5120))            ! Unconditionally start a new file
2     THEN
3         BEGIN
3         !
3         ! Must start a new output file.
3         ! TMS11 can process only 40-50 block files maximum.
3         !
3         LOCAL
3             L_NAME,
3             SPEC_BLK : $XPO_SPEC_BLOCK;
```

```
  3
  3         IF .OLD_FILE [STR$H_LENGTH] EQL 0
  3         THEN
  3             !
  3             ! Save first output file name.
  3             ! We use it to build the new file name and
  3             ! for a related file specification.
  3             !
  3             $STR_COPY (STRING = IOB [IOB$T_RESULTANT], TARGET = OLD_FILE);
  3
  3         !
  3         ! Parse old file name
  3         !
  3         $XPO_PARSE_SPEC (FILE_SPEC = OLD_FILE, SPEC_BLOCK = SPEC_BLK);
  3
  3         !
  3         ! Use up to 6 characters of old file name for new file name
  3         !
  3         IF .SPEC_BLK [XPO$H_FILE_NAME] GEQ 6
  3         THEN
  3             L_NAME = 6
  3         ELSE
  3             L_NAME = .SPEC_BLK [XPO$H_FILE_NAME];
  3
  3         !
  3         ! Close current file
  3         !
  3         $XPO_CLOSE (IOB = .IOB);
  3
  3         !
  3         ! Open new file.
  3         !
  3         FILE_NO = .FILE_NO + 1;
  3         $XPO_IOB_INIT (IOB = .IOB);
P 3         $XPO_OPEN (IOB = .IOB, OPTIONS = OUTPUT, DEFAULT = OLD_FILE,
P 3             FILE_SPEC = $STR_CONCAT ((.L_NAME, .SPEC_BLK [XPO$A_FILE_NAME]),
P 3               $STR_ASCII (.FILE_NO, UNSIGNED, LEADING_ZERO, LENGTH = 3))
P 3             %IF %BLISS (BLISS32) %THEN , FAILURE = OPEN_ERROR %FI
  3             );
  3
L 3 %IF %BLISS (BLISS32)
  3 %THEN                                                   ! Signal messages in BLISS32
  3
  3         SIGNAL (INDEX$_TMS11, 1, IOB [IOB$T_RESULTANT]);
  3
U 3 %ELSE                                                   ! Use $XPO_PUT_MSG otherwise
U 3
U 3         $XPO_PUT_MSG (SEVERITY = SUCCESS,
U 3             STRING = $STR_CONCAT ('output file full - continuing with file ''', IOB [IOB$T_RESULTANT], '''')
U 3
  3 %FI
  3
  3         !
  3         ! Write initial lines
  3         !
  3         $XPO_PUT (IOB = .IOB, STRING = TMSTOF);
  3         $XPO_PUT (IOB = .IOB, STRING = ' ');
```

```
;  873           1150 3              TMSCHR = .TMSTOF [STR$H_LENGTH] + 1;
;  874           1151 2              END;
;  875           1152 2
;  876           1153 2          !
;  877           1154 2          ! Write line to file
;  878           1155 2          !
;  879           1156 2          TMSCHR = .TMSCHR + .LEN;
;  880           1157 2          $XPO_PUT (IOB = .IOB, STRING = (.LEN, .PTR));
;  881           1158 1          END;


                                                          .PSECT  $PLIT$,NOWRT,NOEXE,2

                                    20  00008 P.AAB:      .ASCII  \ \                                    ;

                                                          .PSECT  $OWN$,NOEXE,2

                                  0001  00010 $IOB$OUTPUT:
                                                          .WORD   1                                      ;
                                 01  0E 00012             .BYTE   14, 1                                  ;
                             00000000'  00014             .ADDRESS P.AAB                                 ;

                                              $STR$TARGET=        OLD_FILE
                                              $STR$FILE_SPEC=     OLD_FILE
                                              $IOB$DEFAULT=       OLD_FILE
                                              $IOB$OUTPUT=        TMSTOF
                                                          .EXTRN  XPO$PARSE_SPEC, XPO$FAILURE
                                                          .EXTRN  XPO$CLOSE, XST$JOIN
                                                          .EXTRN  XST$ASCII, XPO$OPEN
                                                          .EXTRN  XPO$PUT

                                                          .PSECT  $CODE$,NOWRT,2

                                  0FFC  00000             .ENTRY  TMSPUT, Save R2,R3,R4,R5,R6,R7,R8,R9,R10,-   ; 1037
                                                                  R11
                  5B 00000000'  EF  9E 00002             MOVAB   $IOB$OUTPUT, R11                       ;
                  5A 00000000G  EF  9E 00009             MOVAB   XPO$PUT, R10                           ;
                  59 00000000G  EF  9E 00010             MOVAB   XPO$FAILURE, R9                        ;
                  58 00000000'  EF  9E 00017             MOVAB   TMSCHR, R8                             ;
                  5E        B0  AE  9E 0001E             MOVAB   -80(SP), SP                            ;
        50      08  AB          09  78 00022             ASHL    #9, TMSSIZ, R0                         ; 1082
                    50          68  D1 00027             CMPL    TMSCHR, R0                             ;
                                04  19 0002A             BLSS    1$                                     ;
                    0D      10  AC  E8 0002C             BLBS    IDEAL, 2$                              ;
                    50    1400  C0  9E 00030 1$:         MOVAB   5120(R0), R0                           ; 1083
                    50          68  D1 00035             CMPL    TMSCHR, R0                             ;
                                03  18 00038             BGEQ    2$                                     ;
                           00F9  31 0003A                BRW     6$                                     ;
                            F8  A8  B5 0003D 2$:         TSTW    OLD_FILE                               ; 1094
                                1B  12 00040             BNEQ    3$                                     ;
        50      0C  AC          1C  C1 00042             ADDL3   #28, IOB, R0                           ; 1101
                     00000000G  EF  9F 00047             PUSHAB  STR$FAILURE                            ;
                                7E  D4 0004D             CLRL    -(SP)                                  ;
                            F8  A8  9F 0004F             PUSHAB  $STR$TARGET                            ;
                                50  DD 00052             PUSHL   R0                                     ;
                                7E  D4 00054             CLRL    -(SP)                                  ;
```

```
                                    00000000G  EF           05  FB 00056            CALLS    #5, XST$COPY                         ;
                                                            59  DD 0005D 3$:        PUSHL    R9                                   ; 1106
                                                            7E  D4 0005F            CLRL     -(SP)                                ;
                                               7E           01  CE 00061            MNEGL    #1, -(SP)                            ;
                                                        14  AE  9F 00064            PUSHAB   SPEC_BLK                             ;
                                                        F8  A8  9F 00067            PUSHAB   $STR$FILE_SPEC                       ;
                                    00000000G  EF           05  FB 0006A            CALLS    #5, XPO$PARSE_SPEC                   ;
                                               06       28  AE  B1 00071            CMPW     SPEC_BLK+32, #6                      ; 1111
                                                            05  1F 00075            BLSSU    4$                                   ;
                                               57           06  D0 00077            MOVL     #6, L_NAME                           ; 1113
                                                            04  11 0007A            BRB      5$                                   ;
                                               57       28  AE  3C 0007C 4$:        MOVZWL   SPEC_BLK+32, L_NAME                  ; 1115
                                               56       0C  AC  D0 00080 5$:        MOVL     IOB, R6                              ; 1120
                                           2C  A6           02  90 00084            MOVB     #2, 44(R6)                           ;
                                                            59  DD 00088            PUSHL    R9                                   ;
                                                            7E  D4 0008A            CLRL     -(SP)                                ;
                                                            56  DD 0008C            PUSHL    R6                                   ;
                                    00000000G  EF           03  FB 0008E            CALLS    #3, XPO$CLOSE                        ;
                                                        04  A8  D6 00095            INCL     FILE_NO                              ; 1125
   00F4    8F             00                   6E           00  2C 00098            MOVC5    #0, (SP), #0, #244, (R6)             ; 1126
                                                            66     0009F                                                          ;
                                               66 0301003D  8F  D0 000A0            MOVL     #50397245, (R6)                      ;
                                           1E  A6     020E  8F  B0 000A7            MOVW     #526, 30(R6)                         ;
                                                            03  DD 000AD            PUSHL    #3                                   ; 1131
                                                        04  A8  DD 000AF            PUSHL    FILE_NO                              ;
                                               7E     0603  8F  3C 000B2            MOVZWL   #1539, -(SP)                         ;
                                    00000000G  EF           03  FB 000B7            CALLS    #3, XST$ASCII                        ;
                                               6E           57  B0 000BE            MOVW     L_NAME, $STR$STRING0                 ;
                                           02  AE           0E  90 000C1            MOVB     #14, $STR$STRING0+2                  ;
                                           03  AE           01  90 000C5            MOVB     #1, $STR$STRING0+3                   ;
                                           04  AE       2C  AE  D0 000C9            MOVL     SPEC_BLK+36, $STR$STRING0+4          ;
                                                            50  DD 000CE            PUSHL    R0                                   ;
                                                        04  AE  9F 000D0            PUSHAB   $STR$STRING0                         ;
                                    00000000G  EF           02  FB 000D3            CALLS    #2, XST$JOIN                         ;
                                           04  A6           50  D0 000DA            MOVL     R0, 4(R6)                            ;
                                           08  A6       F8  A8  9E 000DE            MOVAB    $IOB$DEFAULT, 8(R6)                  ;
                                           2E  A6           02  88 000E3            BISB2    #2, 46(R6)                           ;
                                           2C  A6           01  90 000E7            MOVB     #1, 44(R6)                           ;
                                                 00000000G  EF  9F 000EB            PUSHAB   OPEN_ERROR                           ;
                                                            7E  D4 000F1            CLRL     -(SP)                                ;
                                                            56  DD 000F3            PUSHL    R6                                   ;
                                    00000000G  EF           03  FB 000F5            CALLS    #3, XPO$OPEN                         ;
                                                        1C  A6  9F 000FC            PUSHAB   28(R6)                               ; 1136
                                                            01  DD 000FF            PUSHL    #1                                   ;
                                                 00000000G  8F  DD 00101            PUSHL    #DSRINDEX$_TMS11                     ;
                                    00000000G  00           03  FB 00107            CALLS    #3, LIB$SIGNAL                       ;
                                           44  A6           6B  9E 0010E            MOVAB    $IOB$OUTPUT, 68(R6)                  ; 1148
                                           2C  A6           07  90 00112            MOVB     #7, 44(R6)                           ;
                                                            59  DD 00116            PUSHL    R9                                   ;
                                                            7E  D4 00118            CLRL     -(SP)                                ;
                                                            56  DD 0011A            PUSHL    R6                                   ;
                                               6A           03  FB 0011C            CALLS    #3, XPO$PUT                          ;
                                           44  A6       08  A8  9E 0011F            MOVAB    $IOB$OUTPUT, 68(R6)                  ; 1149
                                           2C  A6           07  90 00124            MOVB     #7, 44(R6)                           ;
                                                            59  DD 00128            PUSHL    R9                                   ;
                                                            7E  D4 0012A            CLRL     -(SP)                                ;
                                                            56  DD 0012C            PUSHL    R6                                   ;
```

```
                              6A            03  FB 0012E          CALLS    #3, XPO$PUT                                                  ;
                              68            6B  3C 00131          MOVZWL   TMSTOF, TMSCHR                                               ; 1150
                                            68  D6 00134          INCL     TMSCHR                                                       ;
                              68      04    AC  C0 00136 6$:      ADDL2    LEN, TMSCHR                                                  ; 1156
                              50      0C    AC  D0 0013A          MOVL     IOB, R0                                                      ; 1157
                        48    AE      04    AC  B0 0013E          MOVW     LEN, $IOB$OUTPUT                                             ;
                        4A    AE            0E  90 00143          MOVB     #14, $IOB$OUTPUT+2                                           ;
                        4B    AE            01  90 00147          MOVB     #1, $IOB$OUTPUT+3                                            ;
                        4C    AE      08    AC  D0 0014B          MOVL     PTR, $IOB$OUTPUT+4                                           ;
                        44    A0      48    AE  9E 00150          MOVAB    $IOB$OUTPUT, 68(R0)                                          ;
                        2C    A0            07  90 00155          MOVB     #7, 44(R0)                                                   ;
                                            59  DD 00159          PUSHL    R9                                                           ;
                                            7E  D4 0015B          CLRL     -(SP)                                                        ;
                                            50  DD 0015D          PUSHL    R0                                                           ;
                              6A            03  FB 0015F          CALLS    #3, XPO$PUT                                                  ;
                                                04 00162          RET                                                                   ; 1158

; Routine Size:  355 bytes,    Routine Base:  $CODE$ + 03A3


;  882          1159  1
;  883          1160  1 END                                    ! End of module
;  884          1161  0 ELUDOM




                                                                          .EXTRN  LIB$SIGNAL

;                                  PSECT SUMMARY
;
;      Name                       Bytes                       Attributes
;
;  $GLOBAL$                        2064  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $OWN$                             24  NOVEC,  WRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $PLIT$                             9  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                          1286  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  .  ABS  .                          0  NOVEC,NOWRT,NORD ,NOEXE,NOSHR,  LCL,  ABS,  CON,NOPIC,ALIGN(0)




;                            Library Statistics
;
;                                             -------- Symbols --------      Pages       Processing
;      File                                   Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]XPORT.L32;1              590       175        29       252          00:00.1





;                                  COMMAND QUALIFIERS
;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:NDXTMS/OBJ=OBJ$:NDXTMS MSRC$:NDXTMS/UPDATE=(ENH$:NDXTMS)

; Size:           1286 code + 2097 data bytes
; Run Time:          00:47.0
; Elapsed Time:      01:25.4
; Lines/CPU Min:       1482
; Lexemes/CPU-Min: 51731
; Memory Used:  531 pages
; Compilation Complete
```

0345 AH-BT13A-SE
VAX/VMS V4.0

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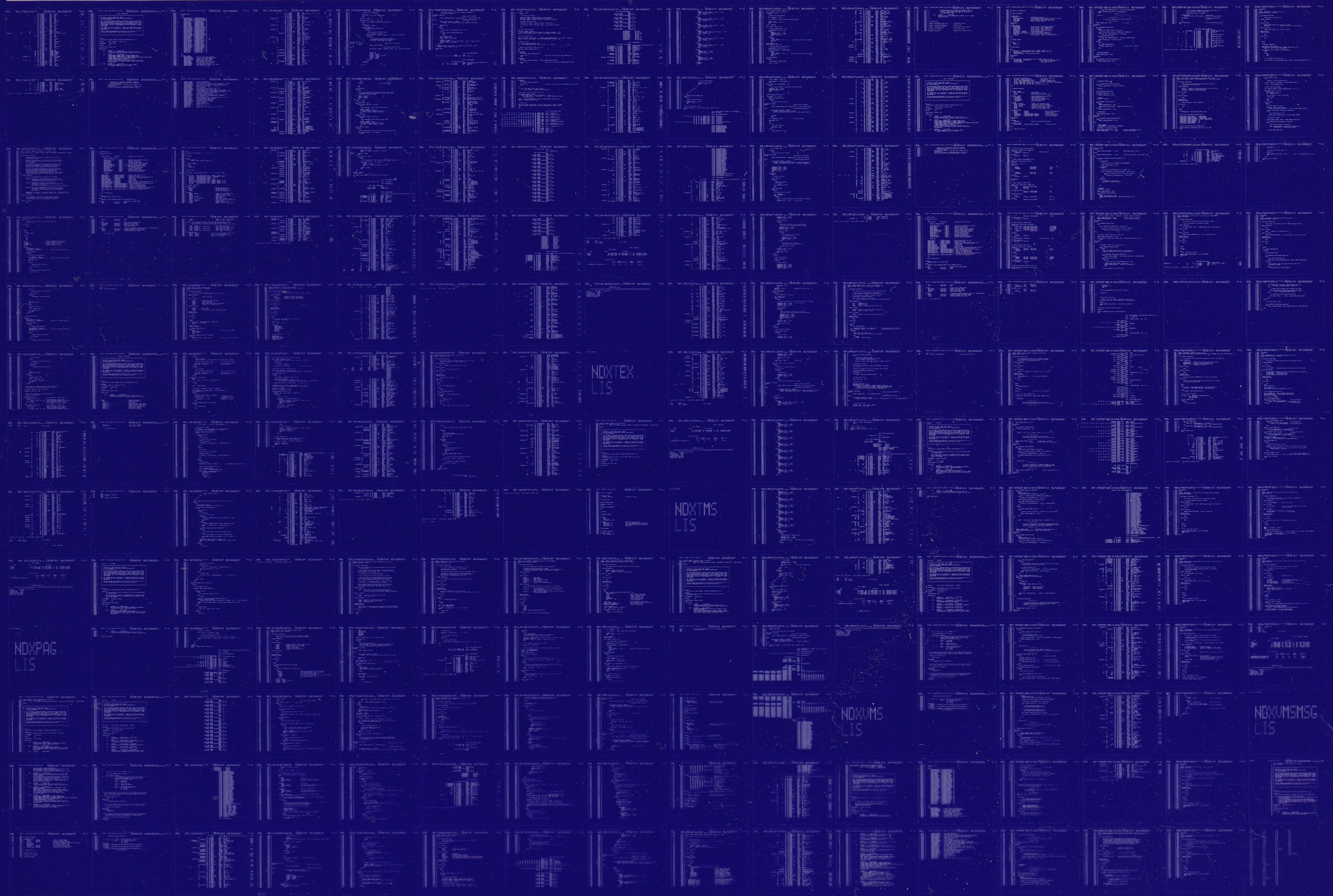

NDXTEX
LIS

NDXTMS
LIS

NDXPAG
LIS

NDXVMS
LIS

NDXVMSMSG
LIS